

well as about the importance of prenatal care. While transportation and child care problems can be addressed by clinics within the existing system, issues pertaining to poverty must be addressed by society as a whole to improve the rate of adequate prenatal care utilization.

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Trends in Rates of Live Births and Abortions Following State Restrictions on Public Funding of Abortion

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Synopsis

Abortion rates rose following the expanded legalization of abortion by the Supreme Court decision in Roe v. Wade. As a result, the impact of the restriction on Federal funding of abortions under the Hyde Amendment in 1977 was not clear. However, abortion rates

had plateaued by 1985, when State funding of Medicaid abortions was restricted in Colorado, North Carolina, and Pennsylvania. Analysis of statewide data from the three States indicated that following restrictions on State funding of abortions, the proportion of reported pregnancies resulting in births, rather than in abortions, increased in all three States.

In 1985, the first year of State restrictions on the use of public funds for abortion, Colorado, North Carolina, and Pennsylvania recorded 1.9 to 2.4 percent increases in the proportion of reported pregnancies resulting in live births, after years of declining rates. With adjustments for underreporting of abortion, there was an overall 1.2 percent rise in the proportion of pregnancies resulting in live births in those States. Nationally the proportion rose only 0.4 percent. By 1987, the three States had experienced increases above 1984 levels of 1.6 to 5.9 percent in the proportion of reported pregnancies resulting in live births.

The experiences of the three States can be used in projecting an expected increase in the proportions of reported pregnancies resulting in live births, rather than in abortions, for similar States. A projection for California, for example, showed that an increase could be expected in the first year of restrictions on the use of public funds for abortion of at least 4,000 births, which could be expected largely to affect women of low income.

THE U.S. SUPREME COURT RULING in the case of *Webster v. Reproductive Health Services* in 1989 opened the door to new State restrictions on abortions performed in public facilities or with public funds. Although increased restrictions are likely in many

States, the probable impact of such legislation on both abortions and births, with its implications for women of low income, is not well understood.

Examining the effects of that part of the original Hyde Amendment to the annual appropriations bill that

Table 1. Abortions and live births per 1,000 women 15–44 years old in three States that began restrictions on public funding of abortion in 1985

Category	1982	1983	1984	1985	1986	1987
Colorado:						
Abortions	21.0	20.6	21.3	18.8	17.0	14.7
Live births	69.8	67.9	66.8	67.0	66.8	65.1
Reported pregnancies ¹	91.5	89.1	88.7	86.4	84.3	80.3
North Carolina:						
Abortions	20.5	21.4	22.3	20.8	20.9	21.6
Live births	59.5	57.3	57.3	58.6	58.9	60.3
Reported pregnancies ¹	80.7	79.3	80.1	80.3	80.3	82.4
Pennsylvania:						
Abortions	21.2	20.6	20.8	18.7	18.1	17.8
Live births	60.4	58.6	57.9	58.8	58.9	59.4
Reported pregnancies ¹	82.2	79.8	79.3	78.0	77.5	77.7

¹ Reported pregnancies include fetal deaths, induced abortions, and live births by State of residence, and exclude spontaneous abortions.

SOURCES: Colorado Department of Health, Health Statistics Section; Colorado Division of Local Government, State Data Center.

North Carolina Department of Human Resources, Division of Health Services, State Center for Health Statistics; Office of State Budget and Management, Demographics Unit.

Pennsylvania Department of Health, State Health Data Center.

initially limited the use of Federal funds in Medicaid-paid abortion services (Public Law 94-439, title 2, Sect. 209 for FY 1977), offers little information about statewide changes in the numbers of births and abortions following the imposition of funding restrictions.

Although the number of federally funded abortions dropped 99 percent in 1978 (1), the reduction had no impact on the overall abortion rate nationwide, which rose rapidly in the period 1970–80 in the wake of the 1973 Supreme Court ruling in *Roe v. Wade* that legalized abortion (2). The District of Columbia and the 16 States that continued to fund abortions at the State level accounted for 98 percent of all public funds spent on abortion services during fiscal year 1978 (1). As a result, nationwide, an estimated 5 percent of Medicaid-eligible women, who could have obtained a federally funded abortion prior to the Hyde Amendment restriction, actually carried their unwanted pregnancies to term in 1978 (3).

Studies of particular States have provided estimates of the proportions of Medicaid-eligible women seeking abortions who carried their pregnancies to term as a result of State-level restrictions on abortion funding that followed the passage of the Hyde Amendment. In Texas, Georgia, and Ohio, States with restrictions, an estimated 18 to 35 percent of the Medicaid-eligible women who were studied, and who would have obtained a State-funded abortion before 1977, continued their unwanted pregnancies to term in 1978 (4–6).

Many of the women were able to obtain abortions at reduced or no cost because of county or local public

funding for the services. Although living on incomes below poverty level, others borrowed or paid for abortions from their own resources. Because many women find alternative means to pay for abortions, it is difficult to predict the overall impact that restrictions on Medicaid funding will have on births.

Studies are needed of statewide changes in the numbers of births and abortions in those States where public funding of abortions is restricted. Using such projections, estimates can be made of the additional need for publicly subsidized care for pregnant women and their children (7). To the extent that access to abortion services is associated with healthier pregnancies and infants, the potential impact on health of decreased access also can be projected (8).

But there are difficulties in studying the impact of statewide abortion restrictions. Abortion rates for Medicaid-eligible women especially can be misleading, because many women who could qualify for Medicaid when they became pregnant would not bother to establish their Medicaid eligibility if they wished to terminate that pregnancy and Medicaid would not pay for the procedure.

Furthermore, restricting public funding for abortion can have an impact on access to abortion beyond the direct effect on those women who could qualify for State-funded abortions. Some clinics specializing in providing reproductive health care to low-income women could be expected to close as a result of diminished revenue, and even those women who had insurance or who paid for abortions would then find their access to abortion services affected.

By examining changes in the proportion of pregnancies that become births in a State, it becomes possible to estimate the expected impact of restricted access to abortion services on the extent to which pregnancies result in births rather than in abortions. Birth and fertility rates are influenced by changes in sexual activity, fertility, family planning, and abortion practices. However, shifts in the proportion of reported pregnancies (which include induced abortions and fetal deaths, as well as live births) that result in live births are influenced primarily by the decision of the pregnant woman whether or not to carry to term.

In 1985, three States (Colorado, North Carolina, and Pennsylvania) restricted funding of abortions for low-income women. Since abortion rates were no longer increasing by 1985 as they had been in the late 1970s, we decided to analyze whether the impact of the most recent statewide restrictions could be measured in statewide shifts in births and abortions. Recognizing that restrictions on public funding affect a small proportion of pregnant women in each State, we realized that the expected effects would be small, if detectable at all.

However, should statewide statistics verify a

decrease in the proportion of pregnancies that ended as abortions and an increase in the proportion of pregnancies that ended with live births, evidence would support the conclusion that such policies have a statewide impact on related issues of public support for the care of pregnant women and their children, provided that the findings could not be explained in any other way.

Pennsylvania, with restrictions that allow the use of State Medicaid funds for abortions only in cases of rape, incest, or life endangerment, provided funds for 10,669 abortions in 1984 and fewer than 900 in 1985.

Colorado, with 1,610 Medicaid-paid abortions in 1984, restricted State Medicaid funding for abortion to cases of life endangerment, fetal defect, or psychiatric conditions which might cause life endangerment, funding 10 cases in 1985 (9).

The North Carolina State Medicaid program cut off all funding for abortions in 1977; however, in 1978 the State legislature instituted a State abortion fund of \$1 million per fiscal year and increased this fund to \$1.4 million in 1982, providing funding for about 7,000 abortions (10). Actual counts of abortions using these funds were unavailable in 1984, but in July 1985 the funding was reduced to \$900,000 and, more significantly, eligibility was restricted to minors and to cases of rape, incest, fetal defect, or life endangerment.

We examined for these three States changes in the proportion of reported pregnancies that resulted in births and in the proportion that ended in abortions, following restrictions on public funding of abortions, to see whether generalizations could be made about what might happen in other States that similarly restricted funding. We used the State of California as an example to apply the findings and made projections for the expected impact on births in that State.

Methods

Data for the number of abortions and live births among State residents, and the number of women 15 to 44 years old, were obtained from the health departments or the State data centers of Colorado, North Carolina, and Pennsylvania for the years 1982–87 (9–16). From the data we calculated yearly abortion rates (the number of abortions per 1,000 women 15–44 years old) and fertility rates (the number of live births per 1,000 women 15–44 years old) by race and age. Abortion and fertility rates were adjusted for changes in the overall pool of women of childbearing age and to eliminate the possibility that the trends shown for induced abortions and live births were caused by changes in the total number of women of childbearing age.

However, the statistics vary with the overall pregnancy rate, which, in addition to shifts in trends from abortions to births, also is sensitive to changes in sexual

activity, fertility, and family planning practices. Describing the abortion and general fertility rates as proportions of the reported pregnancy rate (which includes induced abortions, fetal deaths, and live births per 1,000 women 15–44 years old) reduces the possibility that the trends shown for shifts between the proportions of abortions and live births were the result of changes in the total number of reported pregnancies.

Because the analysis is based on the total population and not sample populations, no statistics are presented to indicate whether the differences are statistically significant. Thus, all differences reported are decreases or increases and they are expressed as a rise or fall in the proportions of reported pregnancies that are live births or abortions.

The reported pregnancy rate does not include pregnancies that ended in spontaneous and unreported induced abortions. The results we report assume that statewide spontaneous abortion rates do not change measurably from year to year. Annual changes in the reporting of induced abortions are the most serious potential problem in this analysis. Although all three States mandate reporting of induced abortions to State health departments, the Colorado and Pennsylvania departments of health assume significant underreporting of induced abortions and yearly fluctuations in reporting compliance, and reflect underreporting in their data.

If underreporting of abortions increased after 1984, then a decline in the total reported pregnancy rates (including abortions, live births, and fetal deaths) per 1,000 women of reproductive age could be expected for 1985 and beyond. However, inspection of total pregnancy rates indicates that no such effect occurred (table 1). To minimize the effects of underreporting on the magnitude of changes, we supplemented analyses of State data with data from the Alan Guttmacher Institute. The institute's data include adjustments for underreporting of abortions in each State for each year for which it surveyed abortion service providers (2).

The institute did not survey providers for 1983, and data from 1986 and 1987 were not available when we performed analyses for 1982–87. Therefore, we relied on State reports from Colorado, North Carolina, and Pennsylvania for the analyses of trends in annual changes for the years 1982–87 within States in the rates for live births, abortions, and pregnancies (tables 1–6), and used the institute's data for the key years of 1984–85 (chart).

We also used the institute's data to compare the changes observed for the three States (so-called newly restricted States) to nationwide changes in 1984–85 in order to determine to what extent any change observed during the first year of restrictions could be explained by socioeconomic effects on fertility nationwide (chart). Potential effects on the results of our computations of

Table 2. Abortions and live births per 100 reported pregnancies¹ in three States that began restrictions on public funding of abortion in 1985

Category	1982	1983	1984	1985	1986	1987
Colorado:						
Abortions	22.9	23.2	24.1	21.7	20.2	18.3
Live births	76.4	76.2	75.3	77.7	79.3	81.2
North Carolina:						
Abortions	25.4	27.0	27.5	26.0	26.1	26.2
Live births	73.9	72.3	71.5	73.4	73.3	73.1
Pennsylvania:						
Abortions	25.8	25.8	26.3	24.0	23.4	22.9
Live births	73.5	73.4	73.0	75.4	75.9	76.4

¹Reported pregnancies include fetal deaths, induced abortions, and live births by State of residence and exclude spontaneous abortions.

SOURCES: Colorado Department of Health, Health Statistics Section; Colorado Division of Local Government, State Data Center.

North Carolina Department of Human Resources, Division of Health Services, State Center for Health Statistics; Office of State Budget and Management, Demographics Unit.

Pennsylvania Department of Health, State Health Data Center.

Table 3. Abortions and live births per 1,000 women 15–44 years old in three States that began restrictions on public funding of abortion in 1985, by age group

Age group	1982	1983	1984	1985	1986	1987
<i>Colorado</i>						
Ages 15–19 years:						
Abortions	33.6	33.9	34.7	33.5	28.6	25.5
Live births	49.8	47.8	45.1	45.0	44.8	46.1
Ages 20–44 years:						
Abortions	18.4	18.1	18.8	16.1	14.9	12.8
Live births	73.8	71.7	70.8	71.0	70.6	68.5
<i>North Carolina</i>						
Ages 15–19 years:						
Abortions	34.0	36.7	39.4	37.7	37.7	38.7
Live births	56.7	54.9	54.7	54.8	55.8	57.0
Ages 20–44 years:						
Abortions	17.4	18.1	19.1	17.6	17.6	18.3
Live births	60.1	57.8	57.9	59.5	59.2	60.9
<i>Pennsylvania</i>						
Ages 15–19 years:						
Abortions	31.8	31.0	32.0	29.9	28.6	29.4
Live births	40.8	39.7	38.1	40.0	40.1	39.7
Ages 20–44 years:						
Abortions	18.7	18.3	18.4	16.4	16.1	15.6
Live births	64.9	62.8	62.2	62.6	62.7	63.2

SOURCES: Colorado Department of Health, Health Statistics Section; Colorado Division of Local Government, State Data Center.

North Carolina Department of Human Resources, Division of Health Services, State Center for Health Statistics; Office of State Budget and Management, Demographics Unit.

Pennsylvania Department of Health, State Health Data Center.

changes in unreported abortions are considered in the discussion.

Results

The proportions of reported pregnancies resulting in births in Colorado, North Carolina, and Pennsylvania in 1982–87 reveal similar trends in all three States (table

1). The live-birth proportions, which declined to various degrees, began to increase in 1985, the year that restrictions on abortion funding took effect, and in two States they accounted for increasing proportions of pregnancy resolutions thereafter.

Before restrictions. In 1982–84, the last years before restrictions were imposed, live births in the three States accounted for a slightly decreasing proportion of the reported pregnancy rate, and abortions comprised a slightly increasing proportion of the rate (tables 1 and 2).

In Colorado, prior to restrictions, the live-birth proportion of the reported pregnancy rate declined 1.1 percent from 76.4 percent in 1982 to 75.3 percent in 1984. The proportion of abortions rose from 22.9 percent of the reported pregnancy rate in 1982 to 24.1 percent in 1984 (table 2).

Rates for North Carolina showed similar changes, where there was a 2.4 percent decline in the live-birth proportion of the reported pregnancy rate from 73.9 percent in 1982 to 71.5 percent 1984. The proportion of abortions increased from 25.4 percent to 27.5 percent in the same years.

Lesser changes occurred in Pennsylvania, where the proportion of live births decreased 0.5 percent from 73.5 percent in 1982 to 73.0 percent in 1984, and the proportion of abortions increased from 25.8 percent in 1982 to 26.3 percent in 1984.

Although the changes in the three States were small, the proportions of pregnancies resulting in live births did not increase, and the proportions of pregnancies resulting in abortions did not decrease in the years just before the restrictions on abortions were imposed.

Restrictions imposed. The trends among reported pregnancies of declining proportions of live births and increasing proportions of abortions were reversed after the States imposed restrictions on public funding of abortion in 1985. The proportion of live births increased in all three States (tables 1 and 2). This trend continued through 1987 in two States.

Live births as a proportion of the reported pregnancy rate in Colorado increased 2.4 percent from 75.3 percent in 1984 to 77.7 percent in 1985 (table 2). The proportion of live births in Pennsylvania also rose 2.4 percent, from 73.0 percent in 1984 to 75.4 percent in 1985. Live births as a proportion of the reported pregnancy rate in North Carolina increased 1.9 percent from 71.5 percent in 1984 to 73.4 percent in 1985.

In 1985, the first year of restrictions, these States experienced an increase of 1.9 to 2.4 percent in the proportion of the 1984 reported pregnancy rate attributable to live births. While these effects are small, they occurred after a 3-year period during which the propor-

tions among the three States had declined 0.5 to 2.4 percent of their 1982 rates.

The numbers indicate that to a degree measurable in statewide statistics, abortions in these three States appear to have shifted to births when public funds were restricted in 1985.

After restrictions. By 1987, the three States had experienced an overall increase of 1.6 to 5.9 percent in the proportion of the reported pregnancies accounted for by live births above 1984 levels (table 2). In both Colorado and Pennsylvania the proportions of live births continued to increase through 1987, the latest year for which data are available. The live-birth proportion in Colorado rose a reported 5.9 percent by 1987 above 1984 levels; in Pennsylvania this figure increased 3.4 percent. Although the live-birth proportion in North Carolina declined slightly in 1986 and 1987 after the initial increase in 1985, by 1987 the overall live-birth proportion was still 1.6 percent above the 1984 level.

Effects. The increasing live-birth proportions occurred for teenagers as well as for adults during the period 1984–87 (tables 3 and 4). However, in States that did not include minors among those who could obtain publicly funded abortions, the live-birth proportion of the reported pregnancy rate for teenagers, those 15–19 years old, rose more than that for adult women, those 20–44 years old.

In Colorado, for teenagers, the proportion of births to reported pregnancies rose 1.0 percent in 1985, the first year of restrictions. By 1987 the proportion for teenagers had grown 8.0 percent from 56.1 percent in 1984 to 64.1 percent in 1987, compared with a 5.3 percent increase for adults, from 78.5 percent in 1984 to 83.8 percent in 1987 (table 4).

In Pennsylvania, the proportion had risen 3.1 percent for teenagers, from 54.0 percent in 1984 to 57.1 percent in 1987, and 3.1 percent for adults, from 76.6 percent in 1984 to 79.7 percent in 1987.

The effect on teenagers was not as pronounced in North Carolina, where minors were explicitly included in those allowed publicly funded abortions. The proportion of pregnancies that resulted in live births increased by nearly the same extent by 1987 for teenagers, 1.4 percent, as for adults, 1.7 percent. The increase for teenagers was from 57.8 percent for 1984 to 59.2 percent for 1987. The increase for adults was from 74.7 percent in 1984 to 76.4 percent in 1987.

The decreasing proportions of abortions and increasing proportions of live births occurred for white non-Hispanic, white Hispanic, and nonwhite racial and ethnic groups (tables 5 and 6). Only in Colorado and North Carolina were there racial or ethnic breakdowns available of the vital statistics, and each State categorized

Table 4. Abortions and live births per 100 reported pregnancies¹ in three States that began restrictions on public funding of abortion in 1985, by age group

Category	1982	1983	1984	1985	1986	1987
<i>Colorado</i>						
Ages 15–19 years:						
Abortions	40.0	41.2	43.2	42.5	38.8	35.4
Live births	59.3	58.2	56.1	57.1	60.8	64.1
Ages 20–44 years:						
Abortions	19.8	20.0	20.9	18.4	17.3	15.7
Live births	79.5	79.3	78.5	81.0	82.1	83.8
<i>North Carolina</i>						
Ages 15–19 years:						
Abortions	37.2	39.8	41.6	40.5	40.1	40.2
Live births	62.1	59.6	57.8	58.9	54.9	59.2
Ages 20–44 years:						
Abortions	22.3	23.7	24.6	22.7	22.7	23.0
Live births	77.0	76.6	74.7	76.7	76.6	76.4
<i>Pennsylvania²</i>						
Ages 15–19 years:						
Abortions	43.5	43.6	45.4	42.5	41.4	42.4
Live births	55.8	55.7	54.0	56.9	58.0	57.1
Ages 20–44 years:						
Abortions	22.2	22.4	22.7	20.6	20.3	19.6
Live births	77.0	76.9	76.6	78.7	79.1	79.7

¹Reported pregnancies include fetal deaths, induced abortions, and live births by State of residence, and exclude spontaneous abortions.

²For Pennsylvania, for abortions, the numerator is the number of abortions for women ages 15–44 years, and the denominator is the population of women ages 10–49; for live births, the numerator is the number of live births for women ages 15–44, and the denominator is the population of women ages 10–49.

SOURCES: Colorado Department of Health, Health Statistics Section; Colorado Division of Local Government, State Data Center.

North Carolina Department of Human Resources, Division of Health Services, State Center for Health Statistics; Office of State Budget and Management, Demographics Unit.

Pennsylvania Department of Health, State Health Data Center.

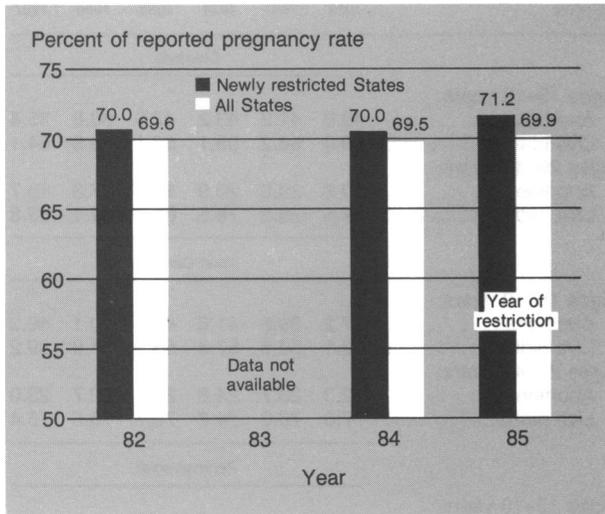
them differently.

In Colorado, minorities had larger increases in the live-birth proportion of the reported pregnancy rate than nonminority groups, 7.3 percent for white Hispanics, 7.6 percent for blacks and other nonwhites, and only 4.7 percent for white non-Hispanics (table 6). The percentages for white Hispanics were 81.8 for 1984 and 89.1 for 1987; for blacks and other nonwhites they were 73.3 for 1984 and 80.9 for 1987; and for white non-Hispanics they were 81.3 for 1984 and 86.0 for 1987.

But in North Carolina, the categories in the State statistics for blacks and other non-whites, and for white Hispanics and non-Hispanics combined, increased by the same amount, 1.7 percent. The percentages for blacks and other nonwhites were 67.3 for 1984 and 69.0 for 1987. The percentages for white Hispanics and non-Hispanics combined were 73.9 for 1984 and 75.6 for 1987.

National comparison. The increase in the proportion of live births in the reported pregnancy rate that occurred in the three States was not seen nationwide (chart). When data adjusted for the underreporting of

Proportion of reported pregnancies, exclusive of miscarriages, accounted for by live births in three States newly restricted in 1985¹ and in all States



¹Colorado, North Carolina, and Pennsylvania

SOURCES: U.S. Statistical Abstracts, 1987 to 1989: Live births, fetal deaths, and legal abortions, by State of occurrence (table 103). Abortion data from surveys by S. Henshaw, Alan Guttmacher Institute.

abortions (2) were used, the 1.2 percent increase in the proportion of the reported pregnancy rate that resulted in live births in the three States was three times the increase for 1985 for the nation. The percentages for the three States were 70.0 for 1984 and 71.2 for 1985. The increase for all States was 0.4 percent, from 69.5 percent for 1984 to 69.9 percent for 1985.

Projections for California. Since 1978, the California State Supreme Court has required Medi-Cal, the Medicaid program in California, to pay for abortions despite restrictions imposed annually by the State legislature. In 1988, the former Democratic-appointed majority on the State Supreme Court bench was replaced by a Republican-appointed majority. Given this change in the composition of the court, we undertook to estimate the impact of a possible policy change on the State funding of abortions.

In 1985, the abortion rate in California was 47.9 per 1,000 women of childbearing age (2), while the general fertility rate was 74.6 (17), providing a reported pregnancy rate for California for 1985 of 122.5 per 1,000 women of childbearing age. Live births accounted for 60.9 percent of the reported pregnancy rate.

Data adjusted for underreporting shows that Colorado, North Carolina, and Pennsylvania together, in the first year of restrictions, experienced a 0.8 percent increase in the proportion of the reported pregnancy rate represented by live births, in addition to the 0.4 percent increase observed for the nation that year (chart).

Using these findings, we can project with caution the effects California could experience, if Medi-Cal restric-

tions are enacted in 1990. If the California experience approximates the average of the three States that imposed earlier restrictions on public funding for abortion, we may see a similar first-year increase in California of at least 0.8 percent in the proportion of the reported pregnancy rate accounted for by live births, or at least 4,000 additional births.

Discussion

In light of the 1989 Supreme Court decision in *Webster v. Reproductive Health Services*, many States will be examining the expected impact of restrictions on abortions performed using public facilities or employees. The impact on the health status of women and infants will be of special concern, because women with low incomes experience particular difficulties in finding affordable abortion services when restrictions on subsidized services are imposed.

An issue of added concern is to what extent the loss of public funding for abortion leads to decreased access to abortion providers in general, because many facilities available to women of low income depend on revenue from public funds to cover operating costs. In addition to their need for subsidized health services, many women and children also are likely to need publicly supported services for food, shelter, clothing, and education (7).

It is important to establish the extent to which the findings in the three States predict what would occur in other States after the restriction of State funding of abortions. Although the three States vary considerably in terms of socioeconomic conditions, similar trends in all three were observed. In all three States there was a shift in pregnancy outcome and births became more common. Although underreporting of abortions after restrictions on public funding could have explained the increase in the proportion of reported pregnancies resulting in births, live births increased in all three States independently of any of the calculations involving reported abortions.

Total pregnancy rates did not decline after 1984, and live birth rates per thousand women of reproductive age, rates that had been decreasing, began to increase in a manner similar to the live-birth proportions in 1985 (table 1). The live birth rate grew least in Colorado because, while the number of live births grew, the number of women of reproductive age in the State increased even more. Furthermore, data adjusted for underreporting of abortions by the Guttmacher Institute show a 1985 increase in live-birth proportions (chart). Thus, it is unlikely that underreporting of abortions explains the phenomenon of increased proportions of live-births observed in all three States.

Since the live-birth proportions of the reported preg-

nancy rates were falling in all three States prior to 1985, the potential extent of live births resulting from restrictions in publicly funded abortions is not fully measured solely by the increase in the proportion of live births. The birth rates in 1985 to 1987 might have been lower than in 1984 in those States if abortion funds had not been restricted.

However, because the national average live-birth proportion that was declining in 1982–84 also grew in 1985 (although to a lesser extent than the live-birth proportions of the States that effected abortion restrictions in that year), it is more conservative to assume that instead of a continuing decline, the live-birth proportion might have grown 0.4 percent greater than its 1984 value if there had been no restrictions on abortions. This assumption also makes an allowance for the fact that not all increased births observed were necessarily to women of low incomes.

The decline in abortions and the increase in births in each of the three States were small after restrictions in public funding in 1985. For the State of California, however, projections based on these findings indicate that at least an additional 4,000 births could be expected in the first year after a statewide restriction on funding.

In comparison with the projections that might be made from other studies, these appear to be conservative. Between 18 and 35 percent of women in need of subsidized abortions carried their pregnancies to term after the Hyde Amendment restricted public funding of abortions in their States (4–6). Since in California the Medicaid program supplemented by State funds pays for more than 80,000 abortions a year, from 14,000 to 28,000 additional births would be projected by these studies.

The projections based on the three States discussed in this paper are likely to be conservative when applied to California because proportionately more abortions are financed by Medicaid in California than were financed by Medicaid in any of the three States prior to the restrictions. The highest ratio of State Medicaid-paid abortions to births (that for Pennsylvania) before the restrictions was 67 Medicaid abortions per 1,000 live births (10,669 Medicaid abortions, 160,001 live births), whereas in California that year the ratio was closer to 180 Medicaid abortions per 1,000 live births (80,291 Medicaid abortions, 447,394 live births).

When using this approach to make projections for other States, however, analysts need to take into account the extent to which a State already is providing funds for abortion.

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Table 5. Abortions and live births per 1,000 women 15–44 years old in two States that began restrictions on public funding of abortion in 1985, by race and ethnicity

Category	1982	1983	1984	1985	1986	1987
<i>Colorado</i>						
White, non-Hispanic:						
Abortions	14.4	14.3	14.0	12.1	10.9	9.4
Live births	65.1	64.0	62.9	63.2	62.7	60.3
White, Hispanic:						
Abortions	14.2	14.1	16.6	12.6	10.2	8.8
Live births	86.1	79.7	78.0	77.4	76.4	77.0
Black and other nonwhites:						
Abortions	29.4	29.2	30.2	28.2	23.9	20.8
Live births	90.8	86.7	85.7	87.3	91.5	92.2
<i>North Carolina</i>						
White, Hispanic and non-Hispanic:						
Abortions	17.5	18.2	18.5	17.2	17.2	17.6
Live births	54.4	52.9	53.7	55.0	54.6	55.9
Black and other nonwhites:						
Abortions	27.6	29.2	32.6	30.5	29.9	31.8
Live births	75.0	70.1	68.8	70.1	71.0	72.4

SOURCES: Colorado Department of Health, Health Statistics Section; Colorado Division of Local Government, State Data Center.

North Carolina Department of Human Resources, Division of Health Services, State Center for Health Statistics; Office of State Budget and Management, Demographics Unit.

Table 6. Abortions and live births per 100 reported pregnancies¹ in two States that began restrictions on public funding of abortion in 1985, by race and ethnicity

Category	1982	1983	1984	1985	1986	1987
<i>Colorado</i>						
White, non-Hispanic:						
Abortions	18.0	18.1	18.2	16.0	14.7	13.4
Live births	81.4	81.2	81.3	83.4	84.8	86.0
White, Hispanic:						
Abortions	14.1	14.9	17.4	13.9	11.7	10.2
Live births	85.2	84.4	81.8	85.3	87.7	89.1
Black and other nonwhites:						
Abortions	24.3	25.0	25.8	24.2	20.6	18.3
Live births	74.9	74.2	73.3	75.1	78.9	80.9
<i>North Carolina</i>						
White, Hispanic and non-Hispanic:						
Abortions	24.2	25.4	25.5	23.7	23.9	23.8
Live births	75.2	74.0	73.9	75.7	75.7	75.6
Black and other nonwhites:						
Abortions	26.6	29.1	32.1	30.1	29.4	30.3
Live births	72.4	69.9	67.3	69.1	69.8	69.0

¹Reported pregnancies include fetal deaths, induced abortions, and live births by State of residence, and exclude spontaneous abortions.

SOURCES: Colorado Department of Health, Health Statistics Section; Colorado Division of Local Government, State Data Center.

North Carolina Department of Human Resources, Division of Health Services, State Center for Health Statistics; Office of State Budget and Management, Demographics Unit.

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HIV Antibody Seroprevalence Among Childbearing Women Surveyed in Maryland

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Synopsis

Because blood specimens from newborns reflect the

antibody status of the mother, seroprevalence rates among childbearing women are obtainable from analysis of the specimens. A blinded survey of human immunodeficiency virus (HIV) antibody seroprevalence among childbearing women was conducted in Maryland. The survey used 31,273 dried filter paper blood spot specimens obtained from newborns screened for hereditary disorders.

Overall, 99 specimens were positive on two enzyme-linked immunoassays and on Western blot, providing a seroprevalence rate of 0.32 percent. The rate for childbearing women residing within the City of Baltimore, 0.7 percent, was significantly higher than the rate for those residing elsewhere in Maryland, 0.1 percent. The statewide rate for nonwhite women, 0.8 percent, was higher than for white women, 0.007 percent. No statistically significant associations were found with residence in an inner city area, as opposed to residence in other areas of the city; birth weight group; reported health of the infant; or the infant having received a transfusion.

AMONG ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS) patients younger than 13 years of age, the most commonly recorded category of transmission is having a mother with human immunodeficiency virus (HIV)

infection or at risk for HIV infection.

In 1988, 68 percent of pediatric cases nationwide (1) and 86 percent of Maryland's pediatric cases were in this transmission category (according to a personal